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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

WASYLCHAK, S

ART UNIT

PAPER NUMBER

DATE MAILED:

09/13/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

**Office Action Summary**

Application No.

09/245592

Applicant(s)

ADDY et al

Examiner

Steven R. Wasylchak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some \* c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) \_\_\_\_.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

**Attachment(s)**

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 17) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other:

### DETAILED ACTION

1. Examined claims 1- 17
2. **Hereafter:** CL = claim(s)

L = line(s)

p = page(s)

### ***Claim Rejections - 35 USC 103***

3. The following is a quotation of 35 USC 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. CL(s) 1-3, 6-9, 12-15 are rejected under 35 USC 103(a) as being unpatentable over Novak (US 5497314) and in view of Lutz (US 6047262) and further in view of Addy (US 5965861).

CL 1,

A method of operating a retail system which includes

- (i) a plurality of self-service checkout terminals, / col 12: CL 18; fig 5; col 2, L 11-13.
- (ii) a first remote supervisor terminal, and / Novak does not explicitly teach a first or any remote supervisor terminal.

However, Novak implicitly teaches additional cameras (col 8, L 13-18). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to

use additional cameras for supervisory functions for the advantage of increasing the target area of the number of checkout counters covered and as a "backup" unit as well as for training purposes.

Furthermore, Lutz discloses a second remote terminal (a display terminal used to observe all the views - individually or jointly - of a number of video cameras) as part of a closed -circuit surveillance video system (col 1, L 60-63). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a secondary terminal feature to gain the advantages of having a "backup" terminal should the first terminal breakdown or be down due to maintenance and for security surveillance.

While both Novak and Lutz fail to explicitly teach the supervisory aspect of the remote supervisory terminal, Addy teaches the supervisory aspect of a checkout terminal video system: col 4, L 17-21. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a checkout terminal feature to gain the advantage of centralized management control and for security surveillance.

(iii) a second remote supervisor terminal, / refer to reasoning above

-operating said first remote supervisor terminal such that said first remote supervisor terminal monitors operation of each of said plurality of self-service checkout terminals during a first period of time; / Novak does not explicitly teach a first remote supervisor terminal performing this specific function during the *first* period. Official notice is taken that it would have been obvious to one of ordinary skill in the art at the time of

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applicant's invention to implement such a feature to gain the advantage of efficiency by systematically monitoring checkout terminals over specific time frames by the fewest number of supervisor terminals without duplication and with the rest being in idle mode.

-maintaining said second remote supervisor terminal in an idle

mode of operation such that said second remote supervisor terminal does not monitor operation of any of said plurality of self-service checkout terminals during said first period of time; / refer to reasoning directly above

-operating said first remote supervisor terminal such that said first remote supervisor terminal monitors operation of a first group of said plurality of self-service checkout terminals during a second period of time; and / refer to reasoning directly above

-operating said second remote supervisor terminal such that said second remote supervisor terminal monitors operation of a second group of said plurality of self-service checkout terminals during said second period of time, / refer to reasoning directly above

-wherein said first group of said plurality of self-service checkout terminals is different from said second group of said plurality of self-service checkout terminals. / Novak: fig 5 and fig 6

CL 2,

The method of claim 1, wherein said step of operating said first remote supervisor terminal such that said first remote supervisor terminal monitors operation of each of said plurality of self-service checkout terminals includes the step of operating said first remote supervisor terminal such that said first remote supervisor terminal monitors

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operation of each of said plurality of self-service checkout terminals so as to assist a plurality of customers respectively operating each of said plurality of self-service checkout terminals. / reasoning as applied to CL 1 and Novak: fig 4: digital camera and fig 5 and fig 6 checkout terminals. However, Novak does not explicitly teach various permutations of supervisory terminals with checkout terminals. Official notice is taken that it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a feature to gain the advantage of queuing efficiency by systematically monitoring checkout terminals by the fewest number of supervisor terminals without duplication and with the rest in idle mode.

CL 3,

The method of claim 1, wherein:

- said step of operating said first remote supervisor terminal such that said first remote supervisor terminal monitors operation of said first group of said plurality of self-service checkout terminals includes the step of operating said first remote supervisor terminal such that said first remote supervisor terminal monitors operation of said first group of said plurality of self-service checkout terminals so as to assist a first group of customers respectively operating each of said first group of self-service checkout terminals, and / reasoning as applied to CL 1. However, Novak does not explicitly teach a 1:1 assignment of supervisor terminals to groups.

Official notice is taken that this feature is old and well known in the point of sale art.

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It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a feature to gain the advantage of queuing efficiency by a systematic tracking of groups by assigning a specific monitor to each group.

-said step of operating said second remote supervisor terminal such that said second remote supervisor terminal monitors operation of said second group of said plurality of self-service checkout terminals includes the step of operating said second remote supervisor terminal such that said second remote supervisor terminal monitors operation of said second group of said plurality of self-service checkout terminals so as to assist a second group of customers respectively operating each of said second group of self-service checkout terminals. / refer to reasoning directly above CL 6,

The method of claim 1, wherein said retail system further includes a third remote supervisor terminal, further comprising the steps of:

- operating said first remote supervisor terminal such that said first remote supervisor terminal monitors operation of a third group of said plurality of self-service checkout terminals during a third period of time; / reasoning as applied to CL 1. However, Novak does not explicitly teach a sequential assignment of different terminals to different groups over the same time period

Official notice is taken that these features are old and well known in the point of sale art. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a feature of sequential assignment to gain the advantage of queuing efficiency by a systematic tracking of groups by the assigning of a

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specific monitor to sequences of different checkout terminals and different groups over the same time frames and by not keeping monitors unnecessarily idle.

-operating said second remote supervisor terminal such that said second remote supervisor terminal monitors operation of a fourth group of said plurality of self-service checkout terminals during said third period of time; and / refer to reasoning directly above

-operating a third remote supervisor terminal such that said third remote supervisor terminal monitors operation of a fifth group of said plurality of self-service checkout terminals during said third period of time, / refer to reasoning directly above

-wherein each of said first group of self-service checkout terminals, said second up of self-service checkout terminals, said third group of self-service checkout terminals, said fourth group of self-service checkout terminals, and said fifth group of self-service checkout terminals is different from one another. / refer to reasoning directly above

CL 7.

A method of operating a retail system, comprising the steps of:

-operating a first remote supervisor terminal so as to monitor operation of a first group of self-service checkout terminals during a first period of time; / However, Novak does not explicitly teach the permutation of a sequential assignment of different terminals to different groups over *different* time periods.

Official notice is taken that this feature is old and well known in the point of sale art.



It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a feature to gain the advantage of efficiency by minimizing customer checkout time by utilizing basic operations research with linear programming and queuing theory.

-operating a second remote supervisor terminal so as to monitor operation of a second group of self-service checkout terminals during said first period of time; / refer to reasoning directly above

-operating said first remote supervisor terminal so as to monitor operation of said second group of self-service checkout terminals during a second period of time; and / refer to reasoning directly above

- operating said second remote supervisor terminal so as to monitor operation of said first group of self-service checkout terminals during said second period of time, / refer to reasoning directly above

-wherein said first group of self-service checkout terminals is different from said second group of self-service checkout terminals / refer to reasoning directly above

CL 8,

The method of claim 7, wherein:

-said step of operating said first supervisor terminal so as to monitor operation of said first group of self-service checkout terminals includes the step of operating, said first supervisor terminal so as to assist a first group of customers respectively operating said

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first group of self-service checkout terminals during said first period of time, and / refer to reasoning as applied to CL 7 and refer to reasoning above

CL 9,

The method of claim 8, wherein: said step of operating said first supervisor terminal so as to monitor operation of said second group of self-service checkout terminals includes the step of operating said first supervisor terminal so as to assist a third group of customers respectively operating said second group of self service checkout terminals during said second period of time, and / reasoning as applied to CL 7 and as applied to CL 8. However, Novak does not explicitly teach the *assistance* of multiple *pairs* of groups at the same time by different monitors.

Official notice is taken that this feature is old and well known in the point of sale art.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a feature to gain the advantage of a systematic as opposed to random tracking of groups by assigning a specific monitor to multiple pairs groups at various times.

CL 12.

The method of claim 7, further comprising the step of operating a third remote supervisor terminal so as to monitor operation of both said first group of self-service checkout terminals and said second group of self-service checkout terminals during a third period of time. / reasoning as applied to CL 7. However, Novak does not explicitly teach the simultaneous coverage of a pair of groups by a different monitor over a different time frame.

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Official notice is taken that this feature is old and well known in the point of sale art. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a feature to gain the advantage of a systematic and simultaneous tracking of multiple groups by assigning a specific monitor to a multiple group.

CL 13,

A self-service retail system comprising,

-a plurality of self-service checkout terminals for allowing a plurality of customers to checkout items for purchase; / refer to reasoning under CL 1 (I). However, Novak does not explicitly teach a 1:1 mapping of terminals to groups or the permutation of groups, terminals and time with respect to the checkout process.

Official notice is taken that this feature is old and well known in the point of sale art. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a feature to gain the advantage of a systematic and thus efficient tracking of permutations of groups, terminals, and time.

-a first remote supervisor terminal electrically coupled to each of said plurality of self-service checkout terminals; and /refer to reasoning directly above. However, Novak does not teach remote supervisor terminal multiplexing with checkout terminals.

Official notice is taken that the procedure of multiplexing is well known in the communications art. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement a multiplexing feature for the advantage of efficiency by having one supervisor terminal control several checkout terminals.

-a second remote supervisor terminal electrically coupled to each of said plurality of self-service checkout terminals, / refer to reasoning directly above

-wherein

(i) said first remote supervisor terminal is configured to monitor operation of each of said plurality of self-service checkout terminals during a first period of time, / refer to reasoning directly above

(ii) said second remote supervisor terminal is maintained in an idle mode of operation during said first period of time, / refer to reasoning directly above and reasoning under CL 1, for L 9-12

(iii) said first remote supervisor terminal is further configured to monitor operation of a first group of said plurality of self-service checkout terminals during a second period of time, / refer to reasoning directly above under (i)

(iv) said second remote supervisor terminal is further configured to monitor operation a second group of said plurality of self-service checkout terminals during said second period of time, and / refer to reasoning directly above

(v) said first group of said plurality of self-service checkout terminals is different from said second group of said plurality of self-service checkout terminals./ refer to reasoning directly above

CL 14,

The self-service retail system of claim 13, wherein said first remote supervisor terminal is further configured to assist each of said plurality of customers during said first period

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of time. / reasoning as applied to CL 13. However, Novak does not explicitly teach this multiplexing permutation of customers, terminals and time.

Official notice is taken that multiplexing is an old and well known in the communication art.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement multiplexing to gain the advantage of a systematic and complete (as opposed to random) tracking of permutations of customers, terminals and time.

CL 15,

The self-service retail system of claim 13, wherein:

-said first remote supervisor terminal is further configured to assist a first group of said plurality of customers during said second period of time, and / reasoning as applied to CL 13. However, Novak does not explicitly teach this permutation of customers, terminals and time.

Official notice is taken that this feature is old and well known in the point of sale art.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a feature to gain the advantage of a systematic as opposed to random tracking of permutations of terminals, groups and time.

5. CL(s) 4, 5, 10, 11, 16, and 17 are rejected under 35 USC 103(a) as being unpatentable over Novak and in view of Lutz.

CL 4,

The method of claim 1, wherein said step of operating said first remote supervisor terminal such that said first remote supervisor terminal

monitors operation of each of said plurality of self-service checkout terminals includes the step of operating said first remote supervisor terminal so as to provide security to each of said plurality of self-service checkout terminals during said first period of time. / reasoning as applied to CL 1 and with respect to security, refer to Lutz: col 1, L 60 to col 2, L 4  
CL 5,

The method of claim 1, wherein:

-said step of operating said first remote supervisor terminal such that said first remote supervisor terminal monitors operation of said first group of said plurality of self-service checkout terminals includes the step of operating said first remote supervisor terminal so as to provide security to said first group of said plurality of self-service checkout terminals during said second period of time, and / reasoning as applied to CL 1 and refer to reasoning directly above

- said step of operating said second remote supervisor terminal such that said second remote supervisor terminal monitors operation of said second group of said plurality of self-service checkout terminals includes the step of operating said second remote supervisor terminal so as to provide security to said second group of said plurality of self-service checkout terminals during said second period of time. / reasoning as applied to CL 1 and refer to reasoning directly above

CL 10,

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The method of claim 7, wherein:

- said step of operating said first supervisor terminal so as to monitor operation of said first group of self-service checkout terminals includes the step of operating said first supervisor terminal so as to provide security to said first group of self-service checkout terminals during said first period of time, and / reasoning as applied to CL 7 and refer to reasoning directly above

- said step of operating said second supervisor terminal so as to monitor operation of said second group of self-service checkout terminals / reasoning as applied to CL 7 and refer to reasoning directly above

- said step of operating said second supervisor terminal so as to monitor operation of said first group of self-service checkout terminals includes the step of operating said second supervisor terminal so as to assist a fourth group of customers respectively operating said first group of self-service checkout terminals during said second period of time. / reasoning as applied to CL 7 and refer to reasoning directly above

- includes the step of operating said second supervisor terminal so as to provide security to said second group of self-service checkout terminals during said first period of time. / reasoning as applied to CL 7 and refer to reasoning directly above

CL 11,

The method of claim 10, wherein: said step of operating said first supervisor terminal so as to monitor

- service checkout terminals includes operation of said second group of self

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the step of operating said first supervisor terminal so as to provide security to said second group of self-service checkout terminals during said second period of time, and / reasoning as applied to CL 7 and as applied to CL10 and refer to reasoning directly above

-said step of operating said second supervisor terminal so as to monitor operation of said first group of self-service checkout terminals includes the step of operating said second supervisor terminal so as to provide security to said first group of self-service checkout terminals during said second period of time. / refer to reasoning directly above

CL 16,

The self-service retail system of claim 13, wherein said first remote supervisor terminal is further configured to provide security to each of said plurality of self-service checkout terminals during said first period of time. / reasoning as applied to CL 13 and refer to reasoning under CL 4 with respect to security

CL 17,

The self-service retail system of claim 13, wherein:

-said first remote supervisor terminal is further configured to provide security to said first group of said plurality of self-service checkout terminals during said second period of time, and / refer to reasoning directly above

-said second remote supervisor terminal is further configured to provide security to said second group of said plurality of self-service



checkout terminals during said second period of time. / reasoning as applied to CL 13 and refer to reasoning directly above.

6. This application currently names **joint inventors**. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes, absent any explicit written evidence to the contrary presented by the applicant(s), that the subject matter of the various claims was **commonly** owned at the time any inventions covered therein were made. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

### ***Conclusion***

The prior art made of record and not relied upon but still considered **pertinent** to applicant's disclosure:

"New Products" teaches self-checkout using artificial intelligence

Dorman teaches a self-service checkout station

Hennessy teaches self-scanning with illustrations

"Techtracks" gives pictorial view of a self-checkout station

Lutz teaches using weights for security at the checkout station

Addy et al teach motion detection security at the checkout station

Walter et al teach security by scanning items

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Morrison et al teach security by a video system

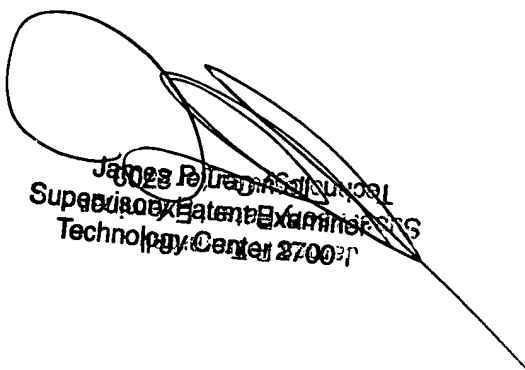
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven R. Wasylchak whose telephone number is (703) 308-2848. The examiner can normally be reached Mon -Thur from 8:00am to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell, can be reached at (703) 305-9768. The fax phone number for the organization where this application is assigned is (703) 305-0040.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-5140.

  
Steven R. Wasylchak

Date: 9/11/00

  
James Trammell  
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